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R CH1762

EXAMINER

ANTHONY, J

ART UNIT PAPER NUMBER

2203

DATE MAILED:

12/03/91

JAMES E. SHIPLEY  
PATENT DIVISION  
LEGAL DEPARTMENT  
E. I. DU PONT DE NEMOURS & CO.  
WILMINGTON, DE 19898

This is a communication from the examiner in charge of your application.  
COMMISSIONER OF PATENTS AND TRADEMARKS

☒ This application has been examined ☒ Responsive to communication filed on 6/28/91 ☒ This action is made final.

A shortened statutory period for response to this action is set to expire 3 month(s), - days from the date of this letter.  
Failure to respond within the period for response will cause the application to become abandoned. 35 U.S.C. 133

Part I THE FOLLOWING ATTACHMENT(S) ARE PART OF THIS ACTION:

- |   |   |
|---|---|
| 1. <input type="checkbox"/> Notice of References Cited by Examiner, PTO-892.        | 2. <input type="checkbox"/> Notice re Patent Drawing, PTO-948.                  |
| 3. <input type="checkbox"/> Notice of Art Cited by Applicant, PTO-1449.             | 4. <input type="checkbox"/> Notice of Informal Patent Application, Form PTO-152 |
| 5. <input type="checkbox"/> Information on How to Effect Drawing Changes, PTO-1474. | 6. <input type="checkbox"/>   |

Part II SUMMARY OF ACTION

1. ☒ Claims 1-6, 10-13 are pending in the application.

Of the above, claims 1-6 are withdrawn from consideration.

2. ☐ Claims have been cancelled.

3. ☐ Claims are allowed.

4. ☒ Claims 10-13 are rejected.

5. ☐ Claims are objected to.

6. ☐ Claims are subject to restriction or election requirement.

7. ☐ This application has been filed with informal drawings under 37 C.F.R. 1.85 which are acceptable for examination purposes.

8. ☐ Formal drawings are required in response to this Office action.

9. ☐ The corrected or substitute drawings have been received on Under 37 C.F.R. 1.84 these drawings are ☐ acceptable; ☐ not acceptable (see explanation or Notice re Patent Drawing, PTO-948).

10. ☐ The proposed additional or substitute sheet(s) of drawings, filed on has (have) been ☐ approved by the examiner; ☐ disapproved by the examiner (see explanation).

11. ☐ The proposed drawing correction, filed has been ☐ approved; ☐ disapproved (see explanation).

12. ☐ Acknowledgement is made of the claim for priority under U.S.C. 119. The certified copy has ☐ been received ☐ not been received ☐ been filed in parent application, serial no. ; filed on

13. ☐ Since this application appears to be in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11; 453 O.G. 213.

14. ☐ Other

EXAMINER'S ACTION

Final Rejection

1. The following is a quotation of 35 U.S.C. 103 which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Subject matter developed by another person, which qualifies as prior art only under subsection (f) and (g) of section 102 of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person.

2. Claims 11, and 13 are rejected under 35 U.S.C. 103 as being unpatentable over Green U.S. Patent Number 4,954,271 alone.

Green teaches non-toxic fire extinguishing compositions consisting essentially of: 1) a higher boiling fluorocarbon, such as 1,1-dichloro-2,2,2-trifluoroethane (50 to 98%), 2) a lower boiling fluorocarbon such as pentafluoroethane, 1,2,2,2-tetrafluoroethane and 1-chloro-1,2,2,2-tetrafluoroethane (0 to 48%) and 3) a detoxifying agent (2 to 10%). Green's composition "differs" from applicant's composition in that the applicant composition does not require Green's component 3).

Applicant's composition is deemed to be obvious over the composition taught and suggested Green. One of ordinary skill in the art could easily make a composition that is a subset of the compositions taught by the above reference. Green teaches that his fluorocarbons are non-toxic by themselves. Only at elevated temperatures do they decomposed to give mineral acids. The detoxifying agent is added to counteract these mineral acids, not to improve the fire extinguishing ability of the composition.

3. Claims 10 and 12 are rejected under 35 U.S.C. 103 as being unpatentable over Green U.S. Patent Number 4,954,271 in view of either Rainaldi et al U.S. Patent Number 3,656,553 or Kung U.S. Patent Number 4,226,728.

Green has been described above. Green differs from applicant's invention for the same reasons given in section 4 of this office action. Furthermore, Green does not directly teach the use of a propellant with his composition.

Rainaldi and Kung teach the well known use of a propellant with halogenated hydrocarbon type fire extinguishing agents.

This rejection builds on the rejection made in section 4 of this office action. It would have been obvious to one having ordinary skill in the art to add a propellant to the compositions of Green using the teachings of Rainaldi and Kung as motivation. In addition, such a combination is very well known in the art. The use of applicant's particular pressure range, is deemed to be within the skill of the ordinary artisan. It is normally not inventive to discover optimum or workable ranges by routine experimentation, In re Aller 105 USPQ 223 1955.

4. Claims 10-13 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

5. In claim 13 the word --consisting-- should be inserted after the word "group". This change would put the claim language into proper Markush language.

6. In response to applicant's amendment a filed 6/28/91, the following comments are in order. The rejection of applicant's amended claims over the Green reference is being maintained. The reason for this is that the language of applicant's claim 13 is deemed to be open to Green's chlorofluoroethane fire-extinguishing agents which are required by Green. These agents of Green's do not

materially change the nature of applicant's composition, and are within the scope of applicant's invention as testified by applicant's claim 11. Applicant's claims have no percentage concentration range that might establish unobviousness if accompanied by data showing superior and unexpected results.

7. Applicant's amendment necessitated the new grounds of rejection. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a). The practice of automatically extending the shortened statutory period an additional month upon the filing of a timely first response to a final rejection has been discontinued by the Office. See 1021 TMOG 35.

A SHORTENED STATUTORY PERIOD FOR RESPONSE TO THIS FINAL ACTION IS SET TO EXPIRE THREE MONTHS FROM THE DATE OF THIS ACTION. IN THE EVENT A FIRST RESPONSE IS FILED WITHIN TWO MONTHS OF THE MAILING DATE OF THIS FINAL ACTION AND THE ADVISORY ACTION IS NOT MAILED UNTIL AFTER THE END OF THE THREE-MONTH SHORTENED STATUTORY PERIOD, THEN THE SHORTENED STATUTORY PERIOD WILL EXPIRE ON THE DATE THE ADVISORY ACTION IS MAILED, AND ANY EXTENSION FEE PURSUANT TO 37 CFR 1.136(a) WILL BE CALCULATED FROM THE MAILING DATE OF THE ADVISORY ACTION. IN NO EVENT WILL THE STATUTORY PERIOD FOR RESPONSE EXPIRE LATER THAN SIX MONTHS FROM THE DATE OF THIS FINAL ACTION.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Joseph Anthony whose telephone number is (703) 308-0440. Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-0766.

J. D. A.

11/26/91

*Richard D. Lovering*  
RICHARD D. LOVERING  
EXAMINER  
GROUP ART UNIT 223